Early Childhood Special Education for Children with Visual Impairments: Problems and Solutions

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Abstract

Studies showing developmental delays in infants and children with visual impairments have triggered early childhood special education studies for this population. Early childhood special education guidelines for visually impaired infants and children range from individualized services to personnel preparation issues while all display certain limitations in practice. This study focuses on the problems faced in the implementation of these guidelines and some possible solutions regarding these limitations, in light of a thorough literature review. These guidelines included steps to be taken in determining the developmental patterns of visually impaired young children, providing instruction in all areas of development, personnel preparation, assessment and evaluation as well as mainstreaming practices and several solutions to overcome barriers were proposed. This discussion is believed to shed light on planning and implementing effective support services for infants and children with visual impairments.

Key Words

Visual Impairment, Early Childhood Special Education, Program Guidelines.

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Vision plays a major role in all areas of development (Baird, & Mayfield, 1997; Dennison, 2000; Fazzi, Signorini, Bova, Ondei, & Bianchi, 2005). Studies show that children with visual impairments show significant lags in development compared to their peers (Brambring, 2001, 2006, 2007; Celeste, 2005; Ferrell, 1998; Özyürek, 1995; Pogrund, Fazzi, & Lampert, 1996; Salt, Dale, Osborne, & Tadic, 2005; Skellenger, & Hill, 1994; Skellenger, & Rosenblum, 1997; Troster, & Brambring, 1994). Such findings have triggered early childhood special education studies addressing the educational needs of these children (Bardin, 2004) who mostly live in under developed countries (Davidson, & Harrison, 2000), as well as in minority groups in developed countries (Di Stefano, Huebner, Garber, & Smith, 2006). Today, we know that these children have unique educational needs and that services are to be provided as best and quick as possible (Council for Exceptional Children [CEC], 1994). We also know that early intervention is crucial due to perspectives such as the dynamic systems approach (Maida, & Mccune, 1996) and other views on the difference early stimulation and early childhood programs make for these children (Celeste, 2005; Davidson, & Harrison, 2000; Deitz, & Ferrell, 1994; Ferrell, 2000; Miada, & Mccune, 1996; Turnbull, Turnbull, & Wehmeyer, 2007).

The aim of this study is to focus on the limitations early childhood special education services face and propose solutions for overcoming these problems.

Early Intervention Guidelines for Children with Visual Impairments

A number of authors have addressed certain guidelines pertaining to effective early childhood special education programs for visually impaired children (CEC, 1994; Corn, & Hatlen, 1996; Davidson, & Harrison, 2000; Salt et al., 2005). These guidelines mainly point to issues involving children, their families, and service providers such as providing services on an individualized basis, providing instruction on all developmental areas, concentrating on family involvement, using suitable assessment tools and procedures, dealing with mainstreaming issues, and providing professional development opportunities to specialists working in the field. Despite their importance in programs for the visually impaired, studies like Hatton's (2001) have pointed the lack of these guidelines in service delivery.

The lack of effective service delivery for children with visual impairments calls for a discussion on what route should be taken in the future. The most important areas of concern are discussed below.

The Developmental Patterns of Children with Visual Impairments:

Studies on the developmental patterns of visually impaired young children mainly show significant delays in all developmental areas compared to their peers (Brambring, 2001, 2006, 2007; Celeste, 2005; Özyürek, 1995; Salt et al., 2005; Shon, 1999; Skellenger, & Hill, 1994; Skellenger, & Rosenblum, 1997; Troster, & Brambring, 1994). Nevertheless, a few studies show opposite findings, claiming that these children on average pass through developmental milestones at or around the same time as their peers (Norris, Spaulding & Brodie, 1957 cited in Shon, 1999; Ferrell, 1990 cited in Deitz, & Ferrell, 1994).

Some authors believe that it is nearly impossible to determine the developmental patterns of visually impaired young children due to lack of research and that factors such as the etiology, level, and onset of disability exert critical effects on development (Celeste, 2005; Davidson, & Harrison, 2000). Thus, since early intervention programs are developed on the basis of developmental characteristics of children (Dale, & Salt, 2007), more research is needed to determine the developmental patterns of children with visual impairments.

The Developmental Domains of Concern: Early intervention programs for children with visual impairments mostly focus on orientation and mobility, play skills, and daily living skills (Goergen, 1997; Lanners, Piccioni, Fea, & Goergen, 1997). Orientation and mobility is one area that differentiates visual impairment from all other disabilities and is one in which these children seek the most support (Brambring, 2001, 2006; Celeste, 2002; McAllister, & Gray, 2006; McHugh, & Lieberman, 2003). Providing a home environment to children with no obstacles is a key issue for orientation and mobility (Lowry, & Hatton, 2002; Özyürek, 1995; Shon, 1999). It is a critical developmental area for its effects on other areas of development. Therefore, early intervention programs for this group of children need to focus on the development of orientation and mobility skills. As such, orientation and mobility is among the most tackled areas of intervention in developed countries (DeMario, & Caruso, 2001; McAllister, & Gray, 2006).

Surely, this does not mean that other areas of development should be left behind because research shows that all areas affect one another (Recchia, 1997; Rettig, 1994; Skellenger, & Hill, 1994; Skellenger, & Rosenblum, 1997; Troster, & Brambring, 1994). Thus services should focus on all developmental areas, perhaps with extra emphasis on orientation and mobility.

Parent-Child Interaction: The important role of mother-child interactions and the need to shape early childhood special education accordingly have led visual impairment research towards the issue (Behl, & Akers, 1996; CEC, 1994; Dale, & Salt, 2007; Loots, Devise, & Sermijn, 2003). Several studies found significant relationships between mother expectations and involvement and the development of their visually impaired children (Baird, & Mayfield, 1997; Craig, 1996; Dote-Kwan, 1995; Jacob, 2005, Loots et al., 2003; Recchia, 1998). These studies have at least three implications for early intervention programs for the visually impaired. First, each mother-child dyad has its own dynamics coupled with its unique needs and thus early intervention programs should be tailored to these dynamics and needs. Secondly, mothers should be shown how and when to react to their children in different circumstances in order to meet their children's needs, which is believed to support children in gaining daily living skills. Lastly, the expectations of mothers, as well as other family members should be formed on the basis of the child's best performance in order to help the family create a rich learning environment for the child.

Personnel Preparation: The primary specialties working with children with visual impairments are teachers of the visually impaired and orientation and mobility specialists. Family counselors, speech therapists and physical therapists are among the other service providers for this population. These specialists need to be aware of the developmental patterns of babies and children with visual impairments, the impact of vision on child development and the effects of vision loss on the child, the family and the society. Specialists also require the knowledge and skills for collaborating with families and other service providers, assessing the needs of children and families and working with children with multiple disabilities (CEC, 1994). Studies show that services for young children with visual impairments among developed countries run on a local basis rather than on specific guidelines and that personnel preparation programs and the number of service providers are few in number (Denni-

son, 2000; Dote-Kwan, Chen, & Hughes, 2001; Gray, 2005; Pogrund et al., 1996; Summers, Leigh, & Arnold, 2006). One way of dealing with personnel issues is providing pre-service and in-service programs through distance education. Studies show that distance education programs are effective in training personnel at both undergraduate and graduate levels (Griffin-Shirley, Almon, & Kelley, 2002; Walker, & Bozeman, 2002). Therefore, alternative models such as distance education should be considered in preparing personnel to work in early childhood special education programs for children with visual impairments.

Developmental Assessment: Developmental assessment is another area of concern in providing services to children with visual impairments (Brambring, & Troster, 1994). According to U.S. laws, the assessment tools should not by their characteristics, inhibit children's performance. Literature, on the other hand, shows that such tools lack in number and quality.

Some of the widely used assessment tools for children with visual impairments are the Reynell-Zinkin Developmental Scales (Fazzi et al., 2005) and the BOS-BLIND (Brambring, & Troster, 1994), which have been criticized for their psychometric properties (Brambring, & Troster, 1994; Dale, & Salt, 2007; Vervloed, Hamers, van Mens-Weisz, & de Vosse, 2000). The assessment of functional vision also displays certain downfalls (Vervloed, Ormel, & Schiphorst, 2001; Hatton, 2001). The main reason for this seems to be the verbal and nonverbal responses needed to assess functional vision, which may be very difficult to get from children under 18 months (Pogrund et al., 1996). Thus, there is a need for developing valid and reliable assessment tools for young children with visual impairments in all developmental areas as well as functional vision.

Mainstreaming: It is the main aim of education to help the visually impaired become a part of society beginning from the early years of life, which results in the need to analyze preschool mainstreaming practices. Mainstreaming can best be practiced in environments "natural" to children with and without visual impairments. Richert's (2007) discussion in this matter is interesting for he believes that the laws do not fit with the term "natural environment" in education. He states that according to the law, natural environments are to be the least restrictive ones but that most mainstreaming practices lack the necessary physical and social conditions that make the environment natural for these children. He

adds that, if this is so, perhaps a separate school for the visually impaired children where the conditions are met may be much better for these children (Richert, 2007). Parallel with Richert, Chen (1999) believes that laws leave parents with only limited options to place their children in natural environments. These views show that mainstreaming needs time and effort to be successful and these practices should be questioned on the basis of arguments such as Richert's. The positive consequences of such efforts can be seen in the literature (D'Allura, 2002; Ek, Fernell, & Jacobson, 2005; McGaha, & Farran, 2001).

Early Childhood Special Education for Children with Visual Impairments in Turkey

A number of efforts for the visually impaired are currently taking place in Turkey but the main problem seems to be the lack of research and practice in the area of early childhood special education. Research is very limited due to lack of university programs (Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, 2004) and practice takes place only at a few special education schools in some of the metropolitans. There isn't any research to date that has questioned the efficacy of these programs. Thus, more research and practice are needed for the early intervention of children with visual impairments in Turkey.

Conclusion

This study focused on the factors that are considered critical for the early education of children with visual impairments. According to this review, effort is needed in the area of determining the developmental patterns of children with visual impairments in order to tailor programs to each child's and family's needs. Secondly, programs should be designed to cover all developmental areas with an emphasis on orientation and mobility skills and parent-child interaction. An equally important factor is developing sound assessment tools to determine the developmental characteristics of children with visual impairments, since valid and reliable measurement will lead to better program planning and implementation. There is also a personnel issue where the field seeks more specialists with the necessary knowledge and skills to work with children with visual impairments and their families. Increasing the concept of collaboration among team members should be a center is-

sue in personnel preparation programs using alternative models such as distance education. Mainstreaming is another issue to be considered in the field of visual impairment and more work is needed to address the conditions that make the environment natural for these children. It is noteworthy to say that all findings related to these factors should be based on empirical evidence. Last, but not least, one should keep in mind that program effectiveness is closely linked with the belief of all stakeholders that children with visual impairments can grow and learn just like their peers.

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